

The
Union Switch & Signal Co.
Swissvale, Pa.



Volume 3
Electro-Pneumatic
Catalogue

A CATALOGUE AND PRICE LIST
OF
Interlocking and
Signaling Devices

MADE BY

THE
UNION SWITCH & SIGNAL Co.
OF PITTSBURGH, PA.

Owners of the Westinghouse System of Electro-Pneumatic Block Signaling and Interlocking.

Also Designers, Manufacturers and Erectors of Pneumatic, Electro-Pneumatic, Electric, Electro-Mechanical, and Purely Mechanical Appliances for Railway Protection.

Automatic, Semi-Automatic and Manually Operated Block Signals.

Electro-Pneumatic, Electric and Mechanical Interlockings to suit conditions.

Plans and Estimates on Application.

General Offices and Works
SWISSVALE, PA.

New York **Chicago** **Montreal**
Central Bldg. **Monadnock Bldg.** **Commercial Union Bldg.**

THE UNION SWITCH & SIGNAL COMPANY'S
PUBLISHING DEPARTMENT
Swissvale, Pa.

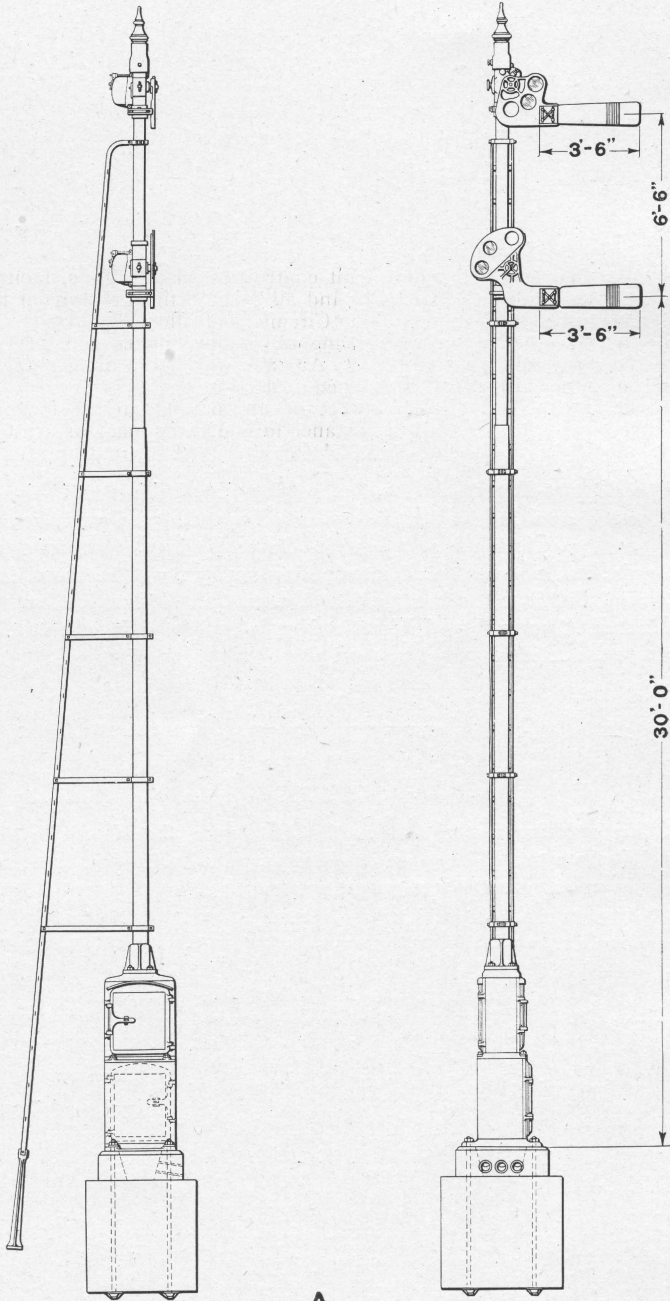
Press of
MURDOCH, KERR & Co.
Pittsburgh, Pa.

PREFACE

The Electro-Pneumatic Appliances for interlocking and signaling which are shown in this Catalogue have been designed and developed since our 1907 Catalogue was issued. Switch fittings, such as detector bars, rods, etc., common to all interlocking systems, will be found in our Mechanical Catalogue, while appliances used for Automatic Control of both Electro-Pneumatic and Electric Signals are listed in our Catalogue covering such articles.

ORDERS

When ordering material from this Catalogue, the Name, Plate and Figure Number should be given in all cases. Also such other information as may be called for in the notes or lists.



SIGNAL COMPLETE DOES NOT INCLUDE LAMPS OR FOUNDATION.

TWO ARM ELECTRIC-PNEUMATIC GROUND SIGNAL
Giving Indications in the Upper Quadrant

TWO ARM ELECTRO-PNEUMATIC GROUND SIGNAL
Giving Indications in the Upper Quadrant

The signals listed below include circuit controllers, blades, glass, front spectacles, ladders, ladder foundations, anchor bolts and all other fittings shown on the opposite plate. For Mechanism see Plate 0991; for Circuit Controller, Plate 0997.

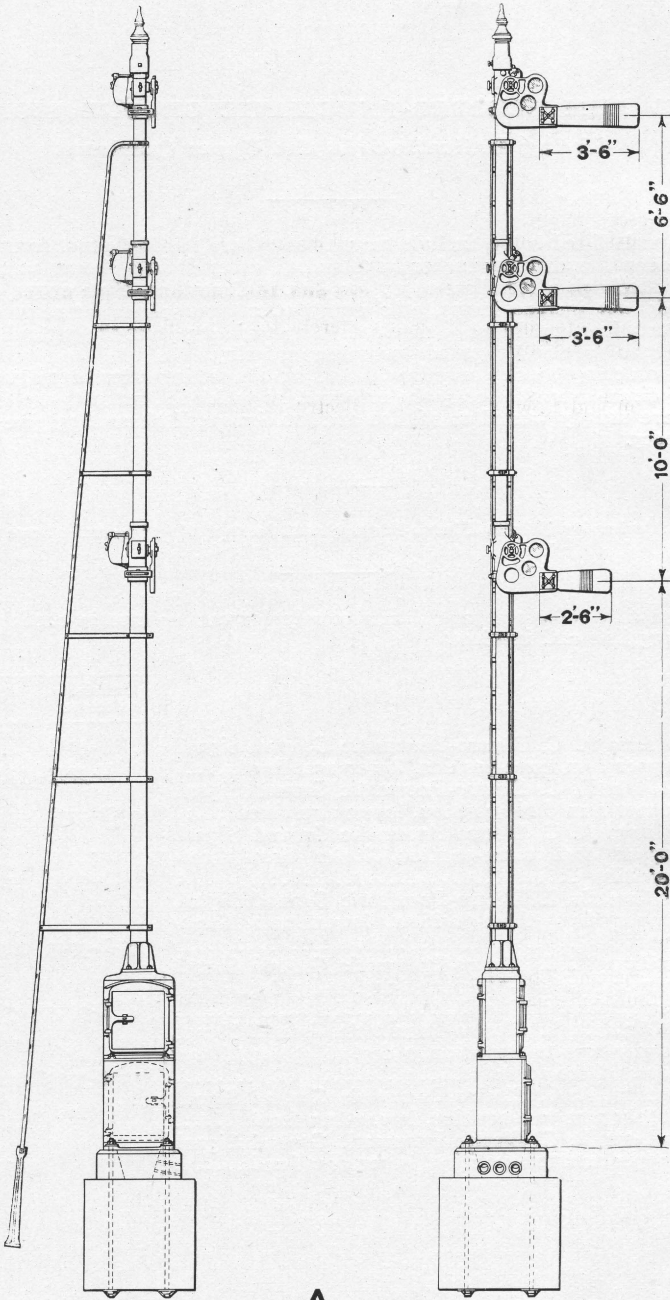
They do not include lamps, pole changers, number plates or reservoirs, which must be ordered separately when required. Any variation from the general dimensions shown must be specifically called for when ordering.

When ordering specify whether direct or alternating current magnets are required. If direct current, specify the resistance to which the magnets are to be wound (magnets are usually wound to 16, 120 and 400 ohms); if alternating, give the voltage and frequency.

Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed.....	B-9795	514 00
Aa	Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed.....	94-B-9795	512 00
Ab	Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position	B-9795	732 00
Ac	Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position	95-B-9795	727 00
Ad	Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....	B-9795	676 00
Ae	Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....	96-B-9795	672 00
Af	Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm two-position, lower arm fixed.....		458 00
Ag	Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm two-position, lower arm fixed.....		457 00



A

SIGNAL COMPLETE DOES NOT INCLUDE LAMPS OR FOUNDATION

TWO ARM AND LOW SPEED ELECTRO-PNEUMATIC GROUND SIGNAL
Giving Indications in the Upper Quadrant

**TWO ARM AND LOW SPEED ELECTRO-PNEUMATIC
GROUND SIGNAL**

Giving Indications in the Upper Quadrant

The signals listed below include circuit controllers, blades, glass, front spectacles, ladders, ladder foundations, anchor bolts and all other fittings shown on the opposite plate. For Mechanism see Plate 0991; for Circuit Controller, Plate 0997.

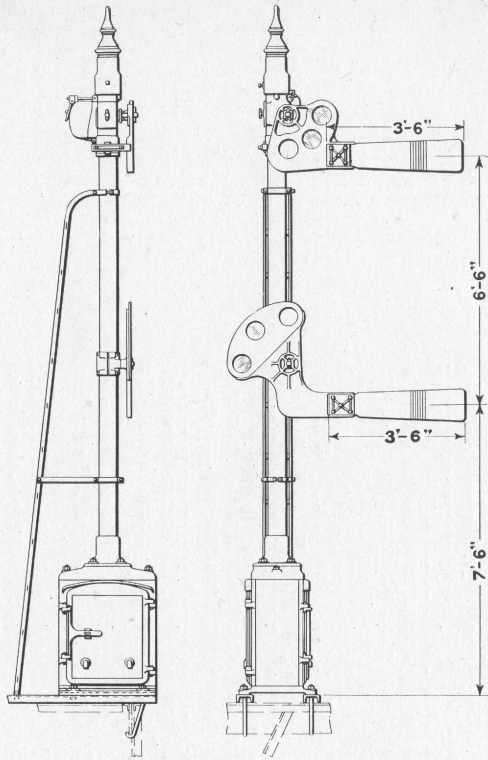
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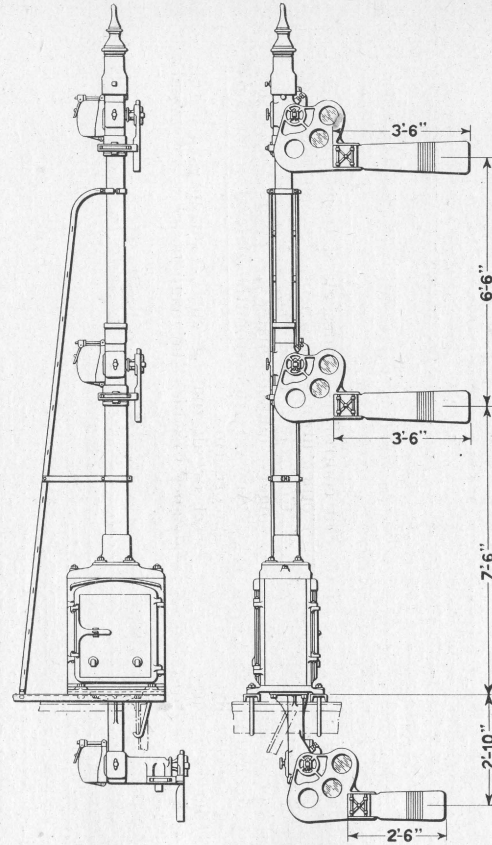
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed, low speed arm two-position, 0 deg. to 45 deg.....	82-B-9795	722 00
Aa	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed, low speed arm two-position, 0 deg. to 45 deg.....		
Ab	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed, low speed arm three-position.....	83-B-9795	771 00
Ac	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed, low speed arm three-position.....		
Ad	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....	84-B-9795	860 00
Ac	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....		
Af	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm fixed, lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....	85-B-9795	722 00
Ag	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm fixed, lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....		
Ah	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm fixed, lower arm three-position, low speed arm three-position....	86-B-9795	771 00
Aj	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm fixed, lower arm three-position, low speed arm three-position....		
Ak	Two Arm and Low Speed D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....	87-B-9795	917 00
Am	Two Arm and Low Speed A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position, low speed arm two-position, 0 deg. to 45 deg.....		



A



B

SIGNALS COMPLETE DO NOT INCLUDE LAMPS

**TWO ARM, AND TWO ARM AND ROUTE ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in the Upper Quadrant**

ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in the Upper Quadrant

The signals listed below include circuit controllers, blades, glass, front spectacles, ladders, hook bolts, channel irons and all other fittings shown on the opposite plate. For Mechanism see Plate 0991; for Circuit Controller, Plate 0997.

They do not include lamps, pole changers, number plates or reservoirs, which must be ordered separately when required. Any variation from the general dimensions shown must be specifically called for when ordering.

When ordering specify whether direct or alternating current magnets are required. If direct current, specify the resistance to which the magnets are to be wound (magnets are usually wound to 16, 120 and 400 ohms); if alternating, give the voltage and frequency.

Give number of tracks that the bridge spans. This information is required to enable us to furnish channel irons of correct length.

Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Two Arm A. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed.....	76-B-9795	415 00
Aa	Two Arm D. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed.....		413 00
Ab	Two Arm A. C. Electro-Pneumatic Bridge Signal, upper arm two-position, 0 deg. to 45 deg., lower arm fixed.....	77-B-9795	359 00
Ac	Two Arm D. C. Electro-Pneumatic Bridge Signal, upper arm two-position, 0 deg. to 45 deg., lower arm fixed.....		358 00
Ad	Two Arm A. C. Electro-Pneumatic Bridge Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....	78-B-9795	577 00
Ae	Two Arm D. C. Electro-Pneumatic Bridge Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....		573 00

ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in the Upper Quadrant

Order by Name, Plate, Figure and Instructions

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

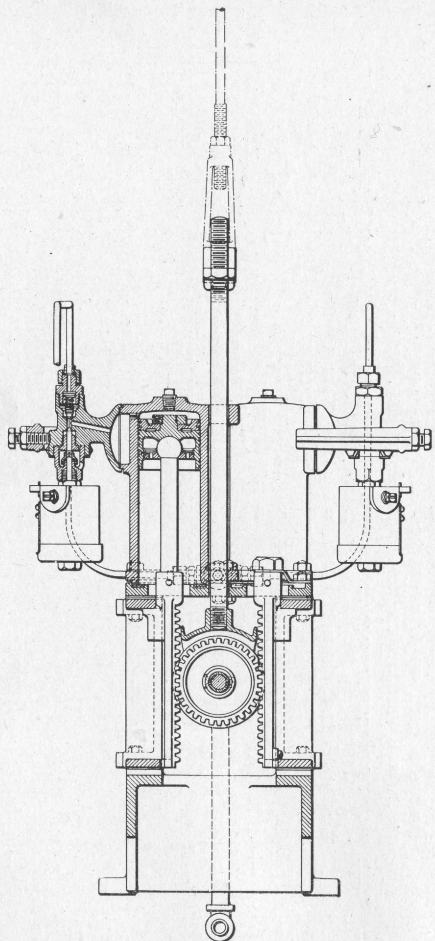
Fig.	Description	Drawing Reference	List Price
B	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed, route arm three-position.....	65-B-9795	702 00
Ba	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed, route arm three-position.....		697 00
Bb	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm fixed, route arm three-position.....	66-B-9795	503 00
Bc	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm fixed, route arm three-position.....		501 00
Bd	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm three-position, route arm three position.....	67-B-9795	702 00
Be	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm three-position, route arm three position.....		697 00
Bf	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm three-position, route arm two-position, 0 deg. to 45 deg.....	68-B-9795	850 00

ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in the Upper Quadrant

Order by Name, Plate, Figure and Instructions

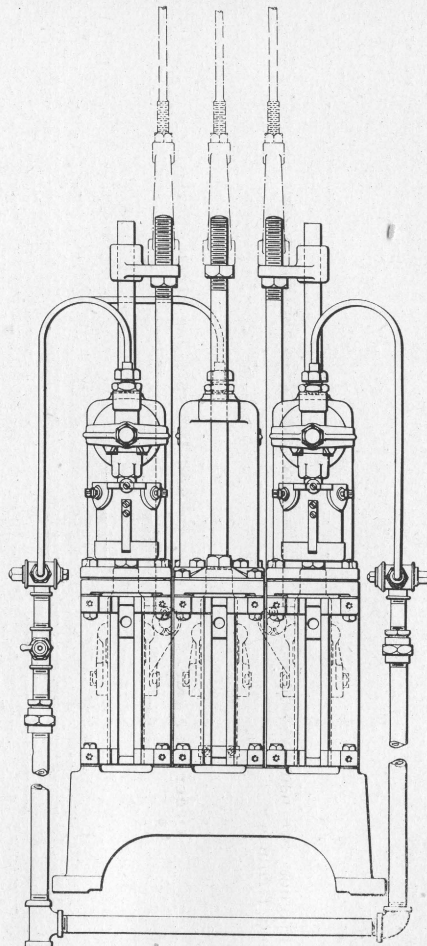
The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
Bg	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm three-position, route arm two-position, 0 deg. to 45 deg.....		844 00
Bh	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed, route arm two-position, 0 deg. to 45 deg.....		651 00
Bj	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm three-position, lower arm fixed, route arm two-position, 0 deg. to 45 deg.....	69-B-9795	647 00
Bk	Two Arm and Route A. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm three-position, route arm two-position, 0 deg. to 45 deg.....		651 00
Bm	Two Arm and Route D. C. Electro-Pneumatic Bridge Signal, upper arm fixed, lower arm three-position, route arm two-position, 0 deg. to 45 deg.....	70-B-9795	647 00



SECTIONAL FRONT VIEW

A



SIDE VIEW

**MECHANISM FOR ELECTRO-PNEUMATIC GROUND AND BRIDGE SIGNALS
Giving Indications in the Upper Quadrant**

**MECHANISM FOR ELECTRO-PNEUMATIC GROUND
AND BRIDGE SIGNALS**

Giving Indications in the Upper Quadrant

When ordering specify whether direct or alternating current magnets are required. If direct current, specify the resistance to which the magnets are to be wound (magnets are usually wound to 16, 120 and 400 ohms); if alternating, give the voltage and frequency.

Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm three-position, lower arm two-position 0 deg. to 45 deg.....	13-B-10356	363 00
Aa	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm three-position, lower arm two-position, 0 deg. to 45 deg.....		369 50
Ab	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm fixed, lower arm two-position, 0 deg. to 45 deg.	1-B-10356	230 50
Ac	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm fixed, lower arm two-position, 0 deg. to 45 deg.		234 40
Ad	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm fixed, lower arm three-position.....	2-B-10356	280 00
Ae	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, middle arm fixed, lower arm three-position.....		285 20
Af	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm two-position, middle arm three-position, lower arm two-position, 0 deg. to 45 deg.....	3-B-10356	303 60
Ag	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm two-position, middle arm three-position, lower arm two-position, 0 deg. to 45 deg.....		308 80
Ah	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm fixed, middle arm three-position, lower arm two-position, 0 deg. to 45 deg.....	4-B-10356	230 50

**MECHANISM FOR ELECTRO-PNEUMATIC GROUND
AND BRIDGE SIGNALS**

Giving Indications in the Upper Quadrant

Order by Name, Plate, Figure and Instructions

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
Aj	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm fixed, middle arm three-position, lower arm two-position, 0 deg. to 45 deg.....		234 40
Ak	Mechanism for Three Arm D. C. Electro-Pneumatic Ground Signal, upper arm fixed, middle arm three-position, lower arm three-position.....	5-B-10356	280 00
Am	Mechanism for Three Arm A. C. Electro-Pneumatic Ground Signal, upper arm fixed, middle arm three-position, lower arm three-position.....		285 20
B	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm fixed, lower arm three-position, suspended arm two-position	15-B-10356	230 50
Ba	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm fixed, lower arm three-position, suspended arm two-position		234 40
Bb	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm three-position, lower arm fixed, suspended arm three-position	6-B-10356	280 00
Bc	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm three-position, lower arm fixed, suspended arm three-position		285 20
Bd	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm fixed, lower arm fixed, suspended arm three-position.	7-B-10356	147 40
Be	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm fixed, lower arm fixed, suspended arm three-position.		150 00
Bf	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm fixed, lower arm three-position, suspended arm three-position	8-B-10356	280 00
Bg	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm fixed, lower arm three-position, suspended arm three-position		285 20

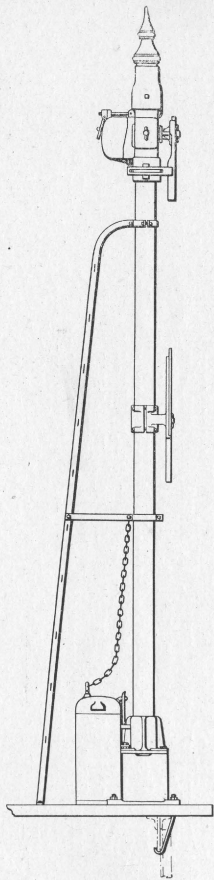
**MECHANISM FOR ELECTRO-PNEUMATIC GROUND
AND BRIDGE SIGNALS**

Giving Indications in the Upper Quadrant

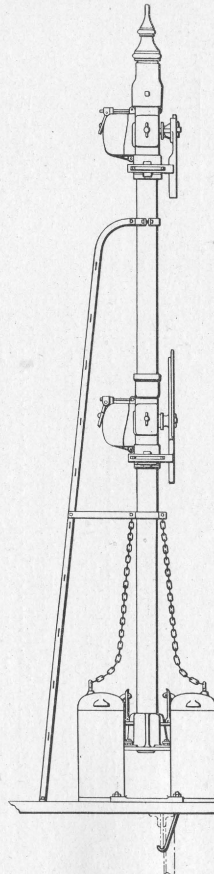
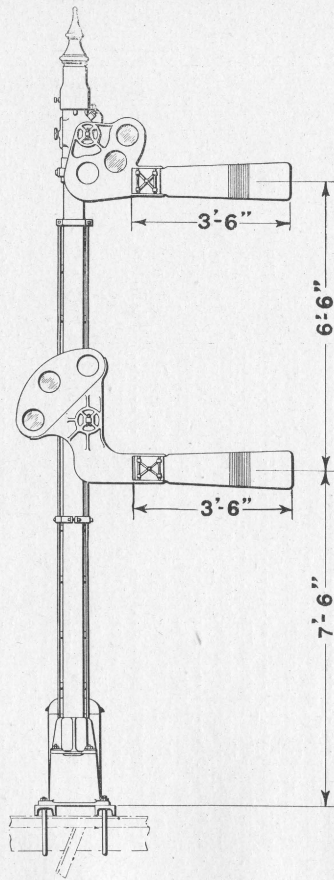
Order by Name, Plate, Figure and Instructions

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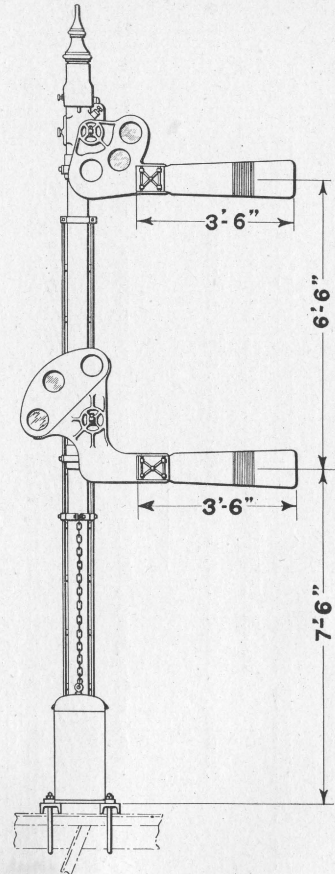
Fig.		Drawing Reference	List Price
Bh	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm three-position, lower arm three-position, suspended arm two-position.....	12-B-10356	363 00
Bj	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm three-position, lower arm three-position, suspended arm two-position.....		369 50
Bk	Mechanism for Two Arm and Suspended D. C. Electro-Pneumatic Signal, upper arm three-position, lower arm fixed, suspended arm two-position	14-B-10356	230 50
Bm	Mechanism for Two Arm and Suspended A. C. Electro-Pneumatic Signal, upper arm three-position, lower arm fixed, suspended arm two-position		234 40
C	Mechanism for Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed.....	9-B-10356	150 00
Ca	Mechanism for Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm fixed.....		147 40
Cb	Mechanism for Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position.....	16-B-10356	285 20
Cc	Mechanism for Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm three-position, lower arm three-position.....		280 00
Cd	Mechanism for Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....	11-B-10356	234 40
Ce	Mechanism for Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm two-position, 0 deg. to 45 deg., lower arm three-position.....		230 50
Cf	Mechanism for Two Arm A. C. Electro-Pneumatic Ground Signal, upper arm two-position, lower arm fixed.....	10-B-10356	94 30
Cg	Mechanism for Two Arm D. C. Electro-Pneumatic Ground Signal, upper arm two-position, lower arm fixed.....		93 00



A



B



SIGNALS COMPLETE DO NOT INCLUDE LAMPS.

ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in Upper Quadrant

ELECTRO-PNEUMATIC BRIDGE SIGNALS
Giving Indications in the Upper Quadrant

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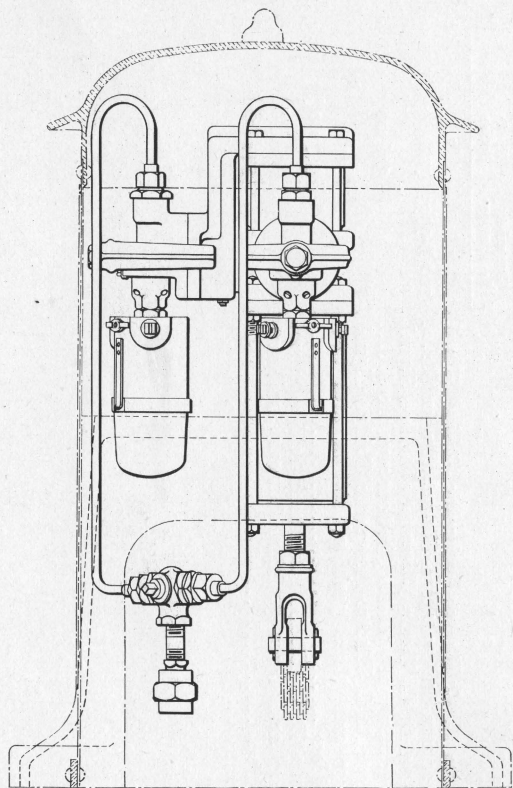
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Give number of tracks that the bridge spans. This information is required to enable us to furnish channel irons of correct length.

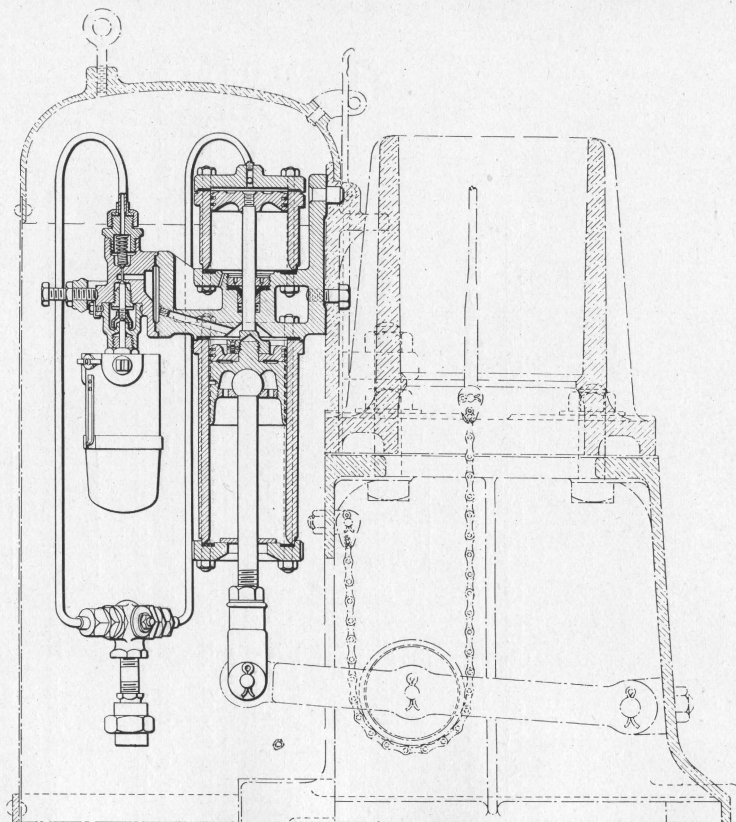
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Two Arm A. C. Electro-Pneumatic Bridge Signal, upper arm three-position, bottom arm fixed.....	100-B-9795	368 00
Aa	Two Arm D. C. Electro-Pneumatic Bridge Signal, upper arm three-position, bottom arm fixed.....		366 00
B	Two Arm A. C. Electro-Pneumatic Bridge Signal, upper arm three position, bottom arm two-position		547 00
Ba	Two Arm D. C. Electro-Pneumatic Bridge Signal, upper arm three position, bottom arm two-position		543 00



FRONT VIEW



SECTIONAL SIDE VIEW

A

MECHANISM FOR ELECTRO-PNEUMATIC GROUND OR BRIDGE SIGNALS
Giving Indications in the Upper Quadrant

**MECHANISM FOR ELECTRO-PNEUMATIC GROUND OR
BRIDGE SIGNALS**

Giving Indications in the Upper Quadrant

On the opposite plate are shown the front and side view of the mechanism for operating Electro-Pneumatic Ground or Bridge Signals, Giving Indications in the Upper Quadrant.

The price listed below covers the parts shown in full. Dot and dash lines are adjacent parts and show the method of applying the mechanism to the base of the signal.

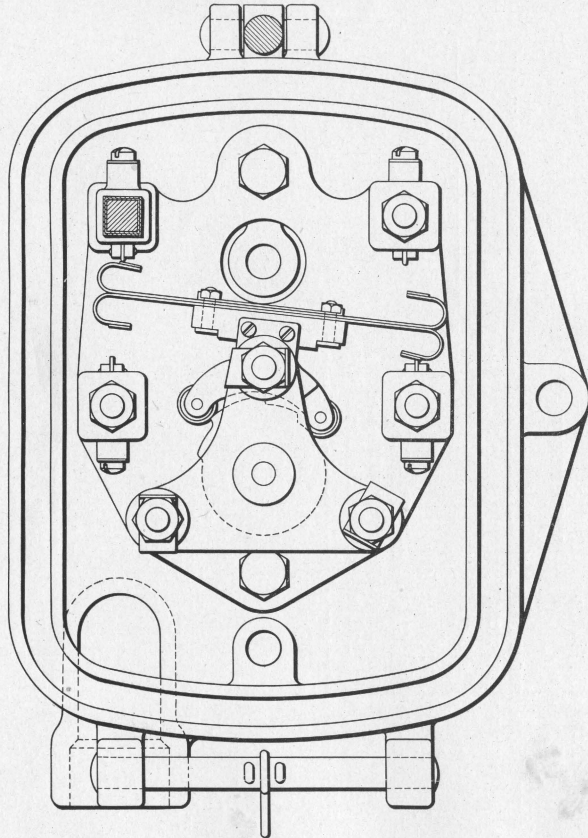
Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

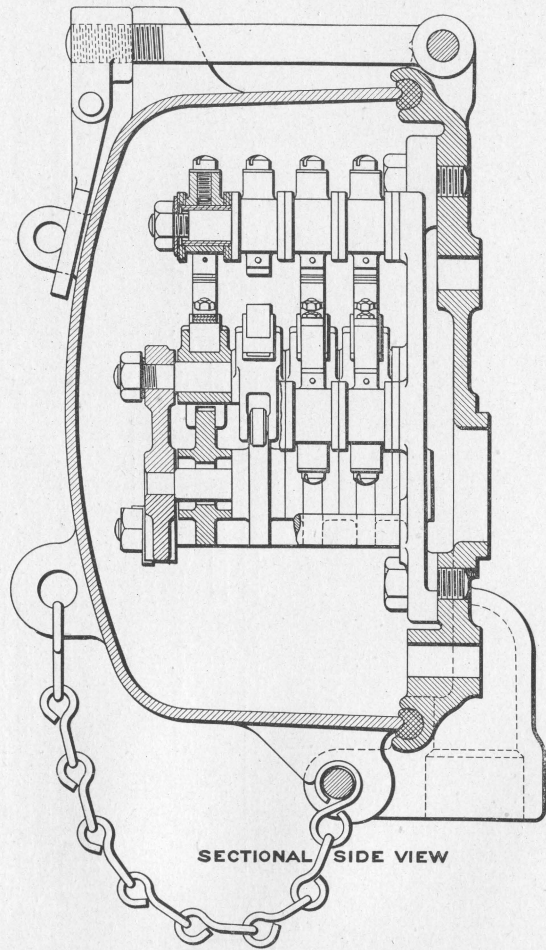
Fig.

A Mechanism with A. C. Inverted Magnet for three-position Electro-Pneumatic Ground or Bridge Signal, Giving Indications in the Upper Quadrant

Drawing Reference	List Price	
6-C-6408	130 00	



FRONT VIEW
COVER REMOVED



SECTIONAL SIDE VIEW

A

SEMAPHORE SHAFT CIRCUIT CONTROLLER

SEMAPHORE SHAFT CIRCUIT CONTROLLER

For application see Plates 0985, 0987, 0989 and 0993.
When ordering specify whether the controllers are for automatic or interlocking signals.

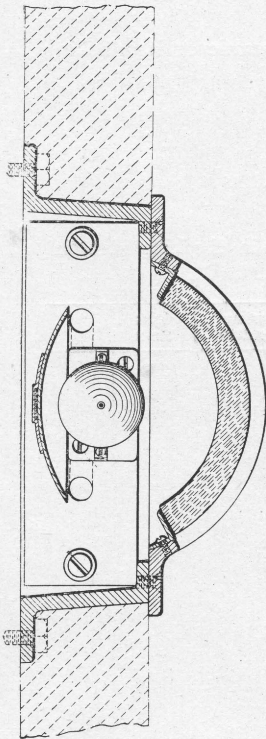
Order by Name, Plate and Number

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

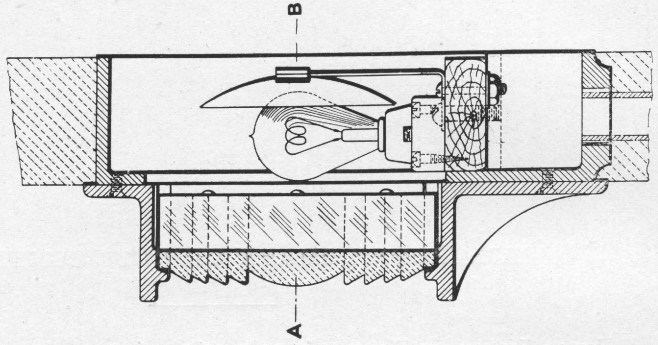
Fig.

A Semaphore Shaft Circuit Controller, Four-Way, as shown, with tap bolts for fastening to semaphore bearing.....

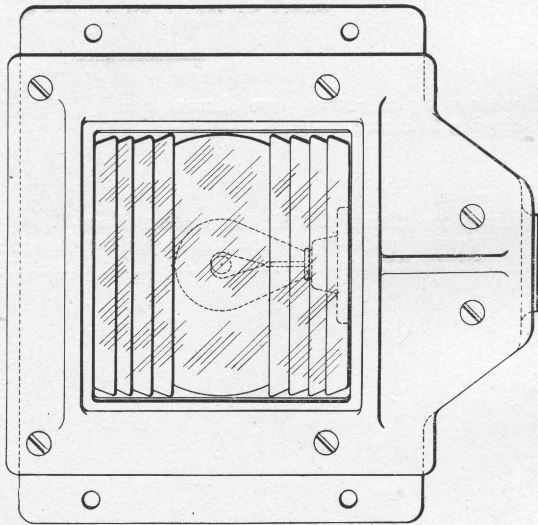
Drawing Reference	List Price	
C-7556	60 00	



PLAN VIEW
SECTION THRO' A-B



SECTIONAL SIDE VIEW



FRONT VIEW

CONDUCTOR'S LIGHT SIGNAL

A

CONDUCTOR'S LIGHT SIGNAL

When ordering specify voltage of lamp.

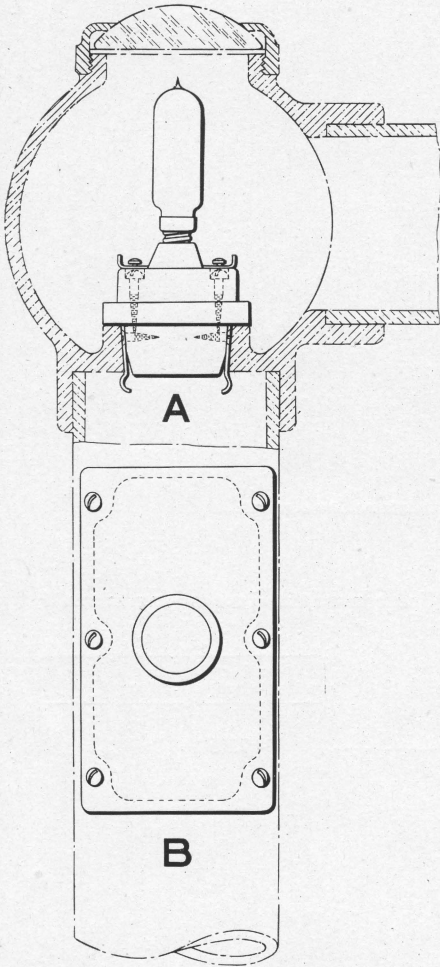
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

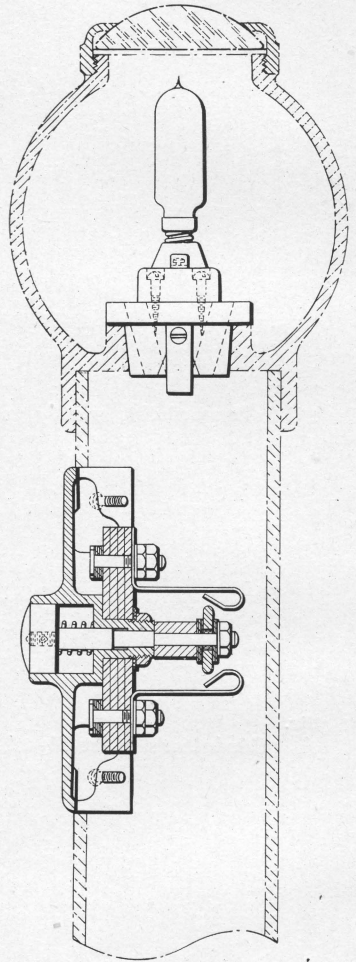
Fig.

A Conductor's Light Signal, as shown.....

Drawing Reference	List Price	
C-7509	9 20	



SECTIONAL FRONT VIEW



SECTIONAL SIDE VIEW

GATEMAN'S LIGHT AND CIRCUIT CONTROLLER
For Train Starting Signal

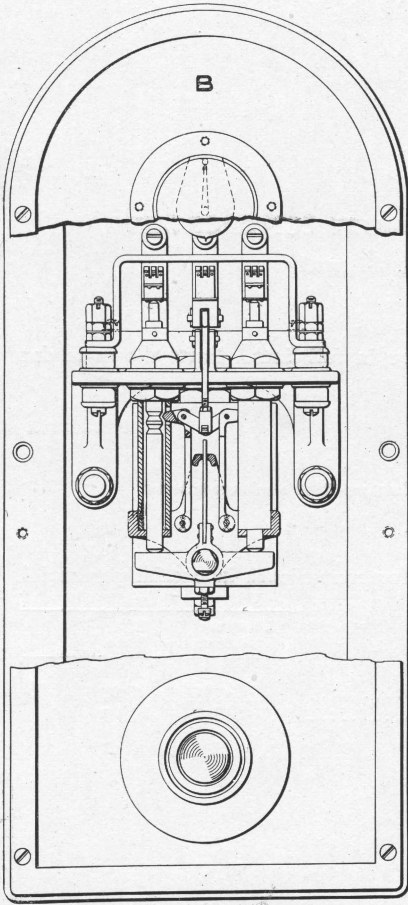
**GATEMAN'S LIGHT AND CIRCUIT CONTROLLER
For Train Starting Signal**

The prices listed below cover the parts shown in full lines. Parts shown in dot and dash are adjacent, and are not included.
When ordering specify voltage for lamp.

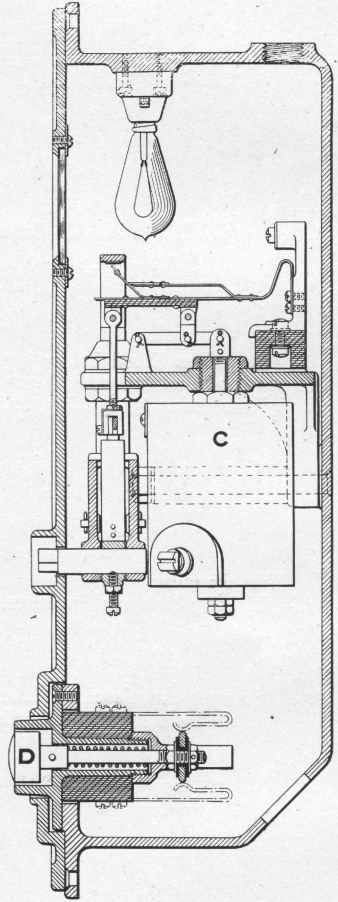
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price	
A	Lamp, complete.....	4-C-7525	2 20	
B	Circuit Controller, complete.....	1-C-7525	15 00	



SECTIONAL FRONT VIEW



SECTIONAL SIDE VIEW

A

CONDUCTOR'S INDICATOR FOR TRAIN STARTING SIGNAL

CONDUCTOR'S INDICATOR FOR TRAIN STARTING SIGNAL

When ordering specify voltage for lamp.

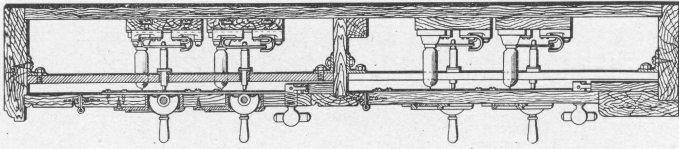
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

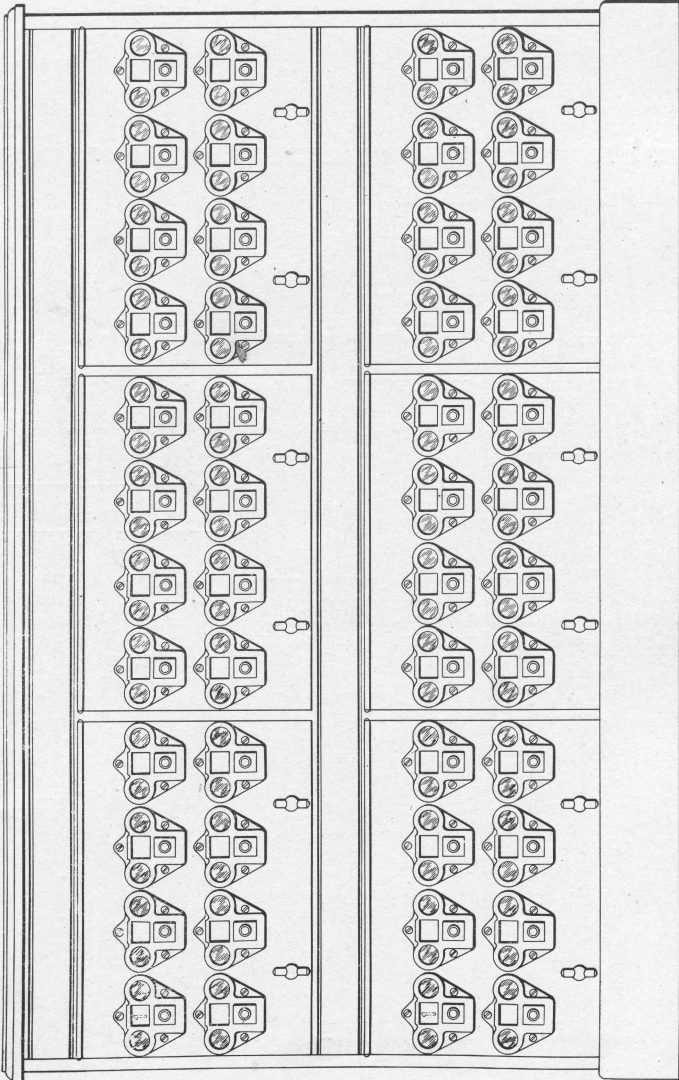
Fig.

- A Conductor's Indicator.....
- B Case with Cover and Glass only.....
- C Indicator Mechanism, complete. No Push Button..
- D Push Button, complete with Guide and Springs.....

Drawing Reference	List Price
I-C-7512	77 00
	12 00
	58 00
	6 50



SECTIONAL END VIEW



FRONT VIEW

A

TOWER INDICATOR

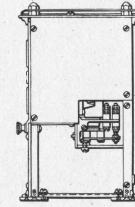
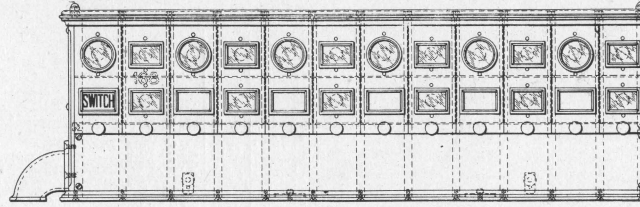
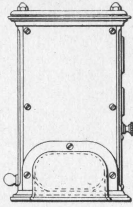
For Train Starting Signals

**TOWER INDICATORS
For Train Starting Signals**

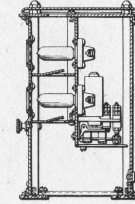
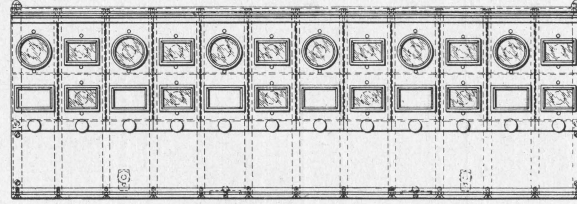
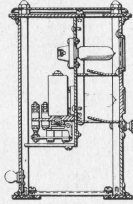
Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

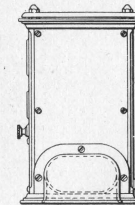
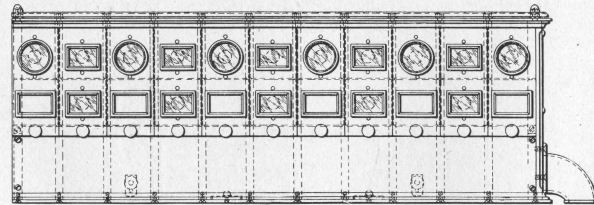
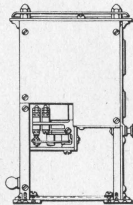
Fig.		Drawing Reference	List Price	
A	Tower Indicator for Train Starting Signal, 48 way..	1-B-10354	930 00	
B	as above, 32 way.....	3-B-10354	630 00	
C	as above, 16 way.....	5-B-10354	330 00	



LEFT HAND SECTION
A



INTERMEDIATE SECTION
B



RIGHT HAND SECTION
C

ILLUMINATED INDICATOR
For Levers on Electro-Pneumatic Interlocking Machine

ILLUMINATED INDICATOR

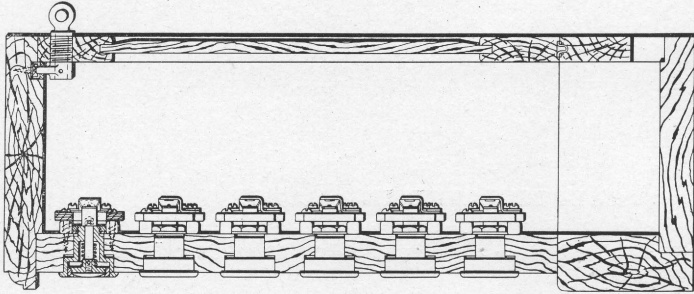
For Levers on Electro-Pneumatic Interlocking Machine

Indicators for Levers on Electro-Pneumatic Machines are made in sections, as illustrated on the opposite page.

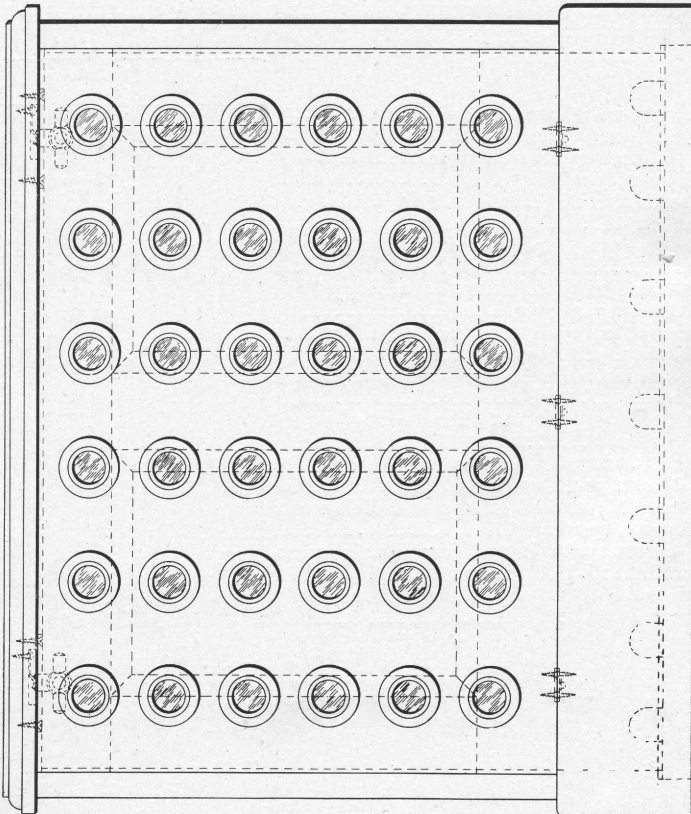
Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.	Description	Drawing Reference	List Price
A	Left hand section, with Lamps and Relays for Switch Levers, per lever.....	C-754I	35 00
Aa	Left hand section, without Lamps or Relays for Switch Levers, per lever		16 50
Ab	Left hand section, with Lamps for Signal Levers, per lever.....		19 50
Ac	Left hand section, without Lamps for Signal Levers, per lever.....		16 50
B	Intermediate section, with Lamps and Relays for Switch Levers, per lever.....		34 50
Ba	Intermediate section, without Lamps or Relays for Switch Levers, per lever.....		16 00
Bb	Intermediate section, with Lamps for Signal Levers, per lever.....		19 00
Bc	Intermediate section, without Lamps for Signal Levers, per lever.....		16 00
C	Right hand section, with Lamps and Relays for Switch Levers, per lever.....		35 00
Ca	Right hand section, without Lamps and Relays for Switch Levers, per lever.....		16 50
Cb	Right hand section, with Lamps for Signal Levers, per lever.....		19 50
Cc	Right hand section, without Lamps for Signal Levers, per lever.....		16 50



SECTIONAL SIDE VIEW



FRONT VIEW

PUSH BUTTON CABINET

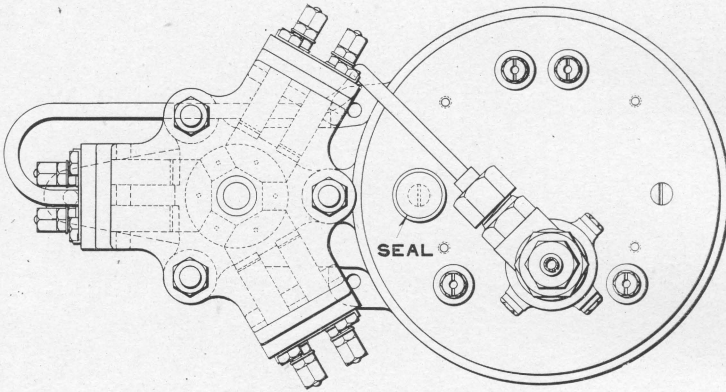
PUSH BUTTON CABINETS

Made with twelve, twenty, thirty-six and sixty push buttons. A thirty-six way is shown.

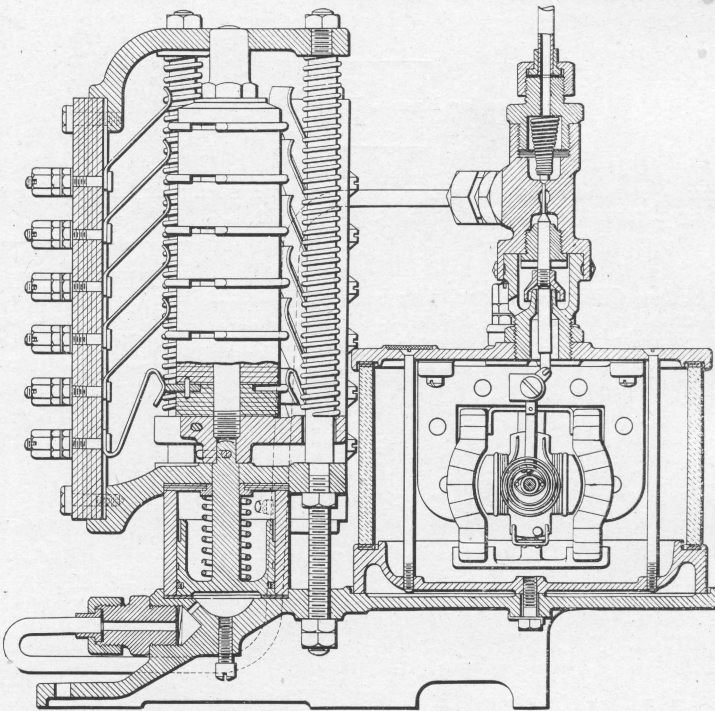
Order by Name, Plate and Letter

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Push Button Cabinet, with 12 push buttons.....	1-C-7535	152 00
B	as above, with 20 push buttons.....	2-C-7535	232 00
C	as above, with 36 push buttons.....	4-C-7535	392 00
D	as above, with 60 push buttons.....	3-C-7535	630 00



PLAN VIEW



SECTIONAL FRONT VIEW

A
ALTERNATING CURRENT ELECTRO-PNEUMATIC RELAY

ALTERNATING CURRENT ELECTRO-PNEUMATIC RELAY

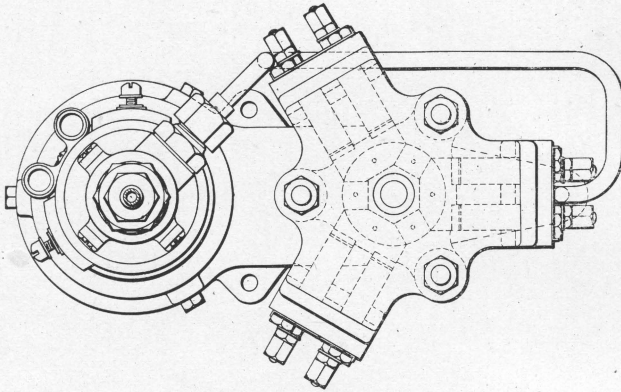
When ordering state limits of air pressure, also the voltage and frequency.

Order by Name, Plate, Figure and Instructions given above

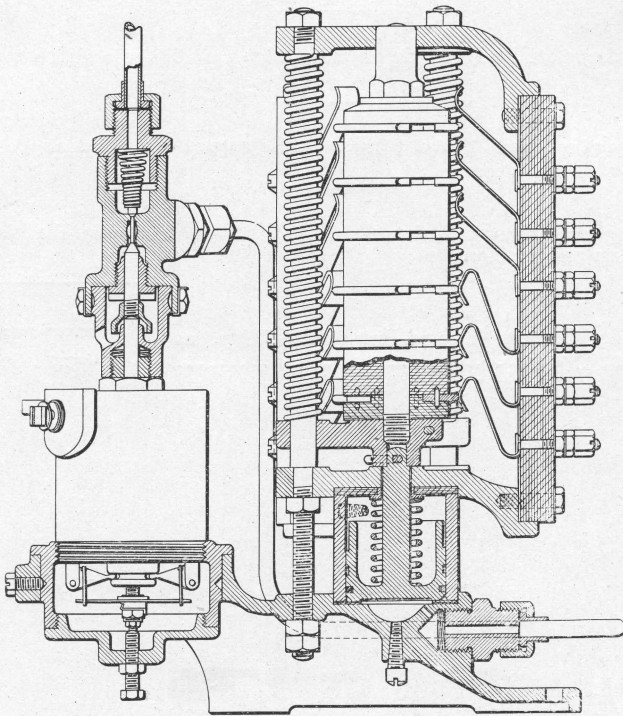
The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.
A Alternating Current Electro-Pneumatic Relay, as
shown, 3-way.....

Drawing Reference	List Price	
D-1509	165 00	



PLAN VIEW



SECTIONAL FRONT VIEW

A

ALTERNATING CURRENT ELECTRO-PNEUMATIC RELAY

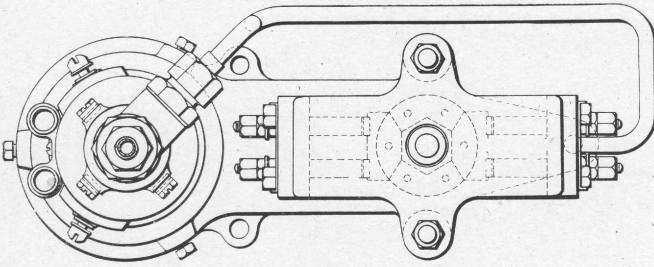
ALTERNATING CURRENT ELECTRO-PNEUMATIC RELAY

● When ordering state limits of air pressure, also the voltage and frequency.

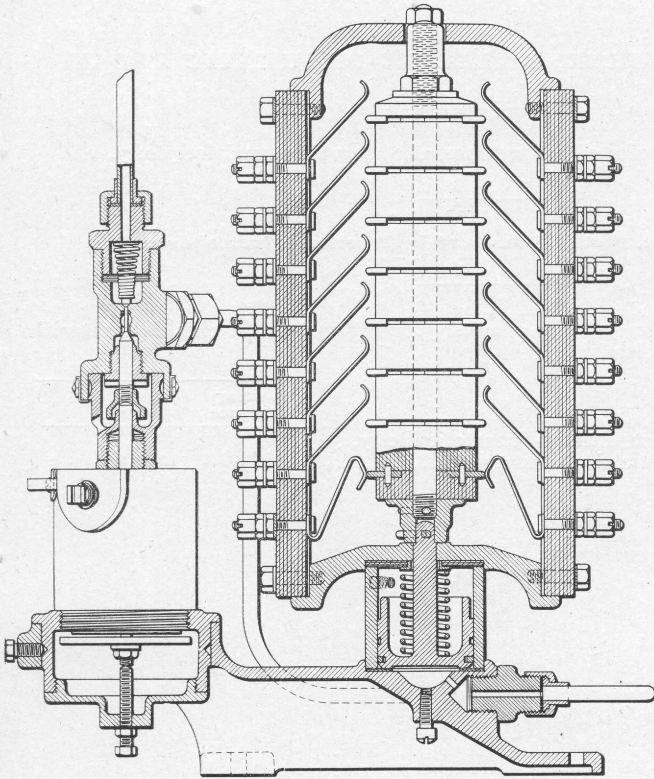
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

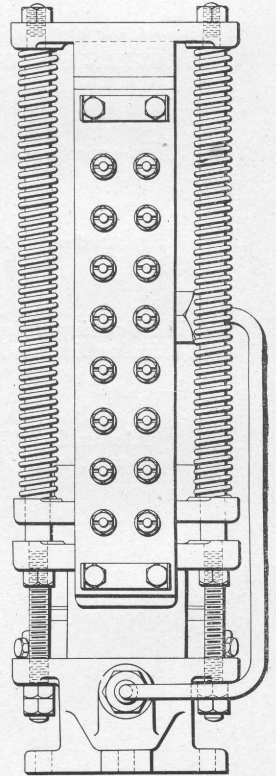
Fig.		Drawing Reference	List Price	
A	Alternating Current Electro-Pneumatic Relay, 3-way, with 9 front and 9 back contact.....	5-C 7811	120 00	



PLAN VIEW



SECTIONAL FRONT VIEW



END VIEW

A

DIRECT CURRENT ELECTRO-PNEUMATIC RELAY

DIRECT CURRENT ELECTRO-PNEUMATIC RELAY

When ordering state limits of air pressure, also resistance for magnet (magnets are usually wound to 16, 120 and 400 ohms).

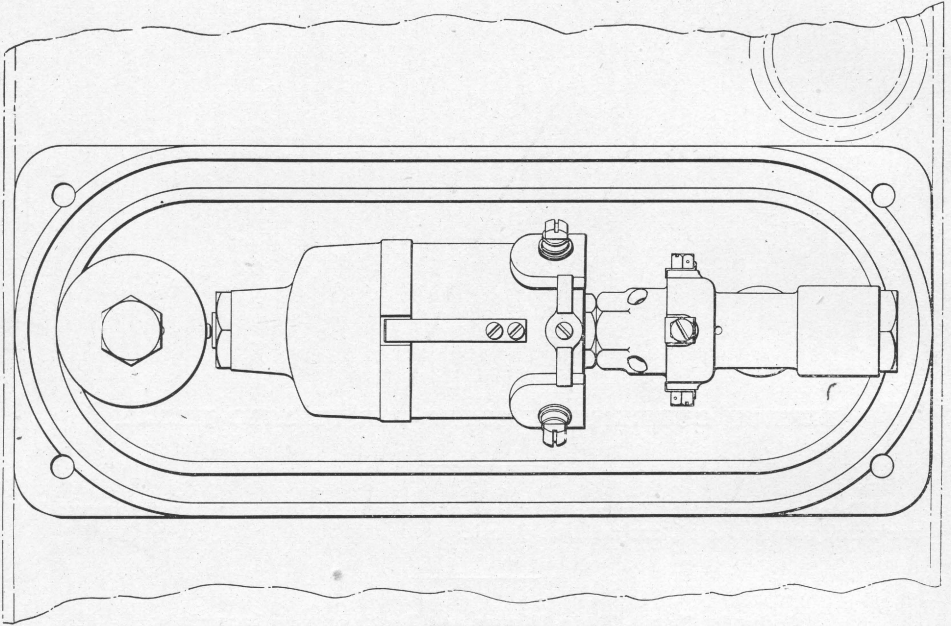
Order by Name, Plate, Figure and Instructions given above

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

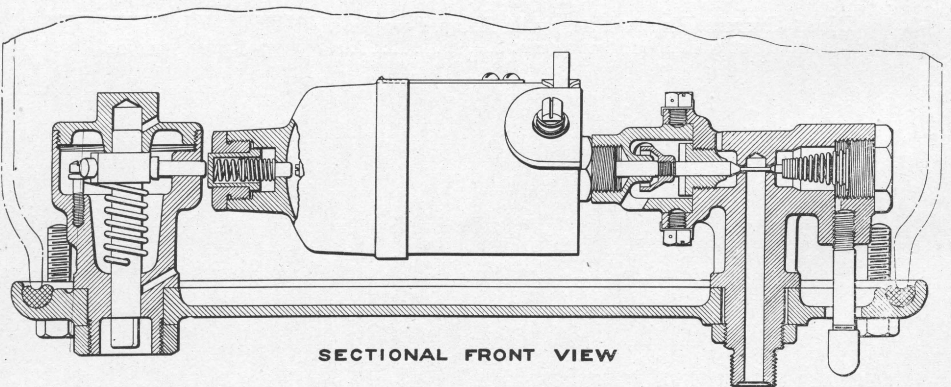
Fig.

A Direct Current Electro-Pneumatic Relay, 2-way, with
14 front and 2 back contacts.....

Drawing Reference	List Price	
7-C-7811	114 00	



PLAN VIEW



SECTIONAL FRONT VIEW

A

AUTOMATIC STOP VALVE AND ECCENTRIC HAND RELEASE

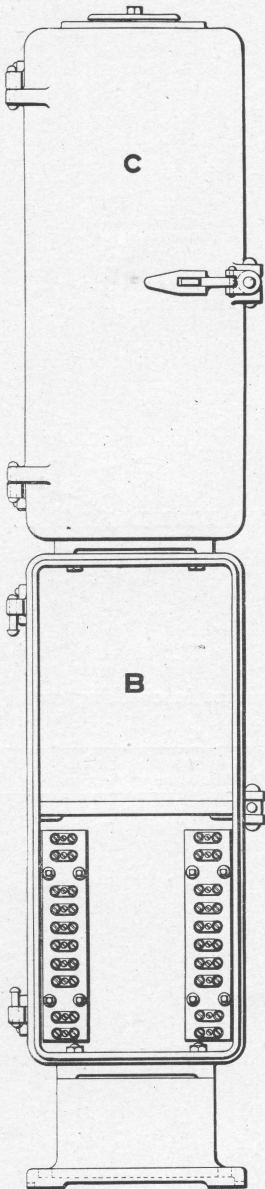
AUTOMATIC STOP VALVE AND ECCENTRIC HAND RELEASE

Order by Name, Plate and Figure

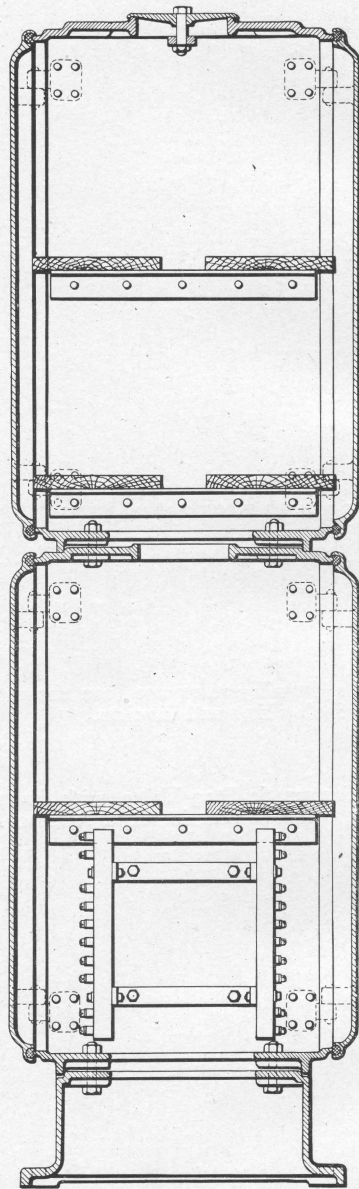
The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig. A Automatic Stop Valve, with Inverted A. C. magnet and Eccentric Hand Release.....

Drawing Reference	List Price	
C-7526	50 00	



FRONT VIEW
COVER REMOVED



SECTIONAL SIDE VIEW

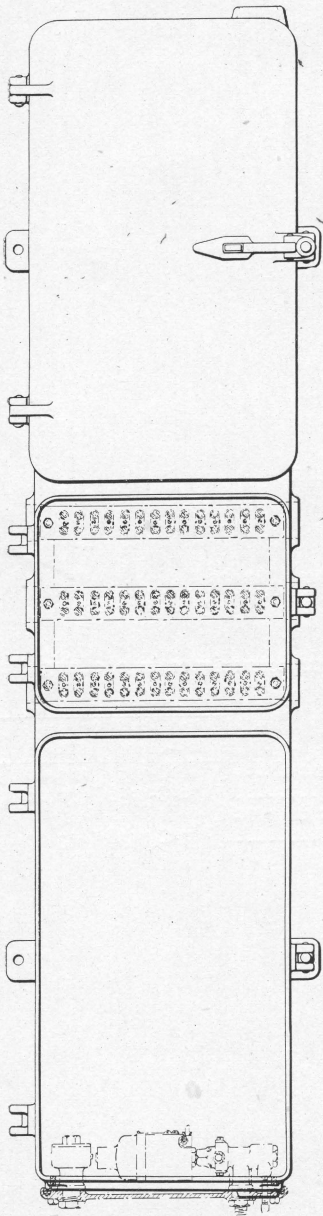
A
VERTICAL RELAY AND TERMINAL CASE

VERTICAL RELAY AND TERMINAL CASE

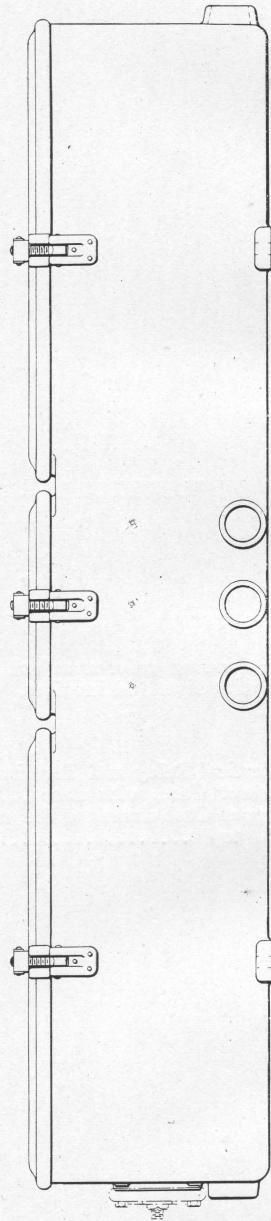
Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Vertical Relay and Terminal Case with terminals...	C-7538	115 00
B	Lower Case, with Base.....	6-C-7538	70 00
C	Upper Case arranged for mounting another case on top	7-C-7538	43 00



FRONT VIEW
COVERS REMOVED



SIDE VIEW

A
INSTRUMENT CASE
For Relays, Terminals and Automatic Stop Release Valve.

INSTRUMENT CASE

The instrument case illustrated on the opposite page is used for housing relays, terminals and automatic stop release valves.

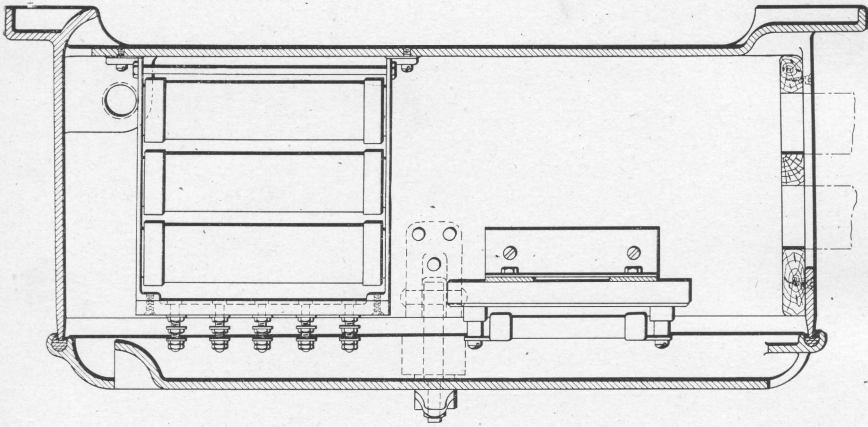
Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

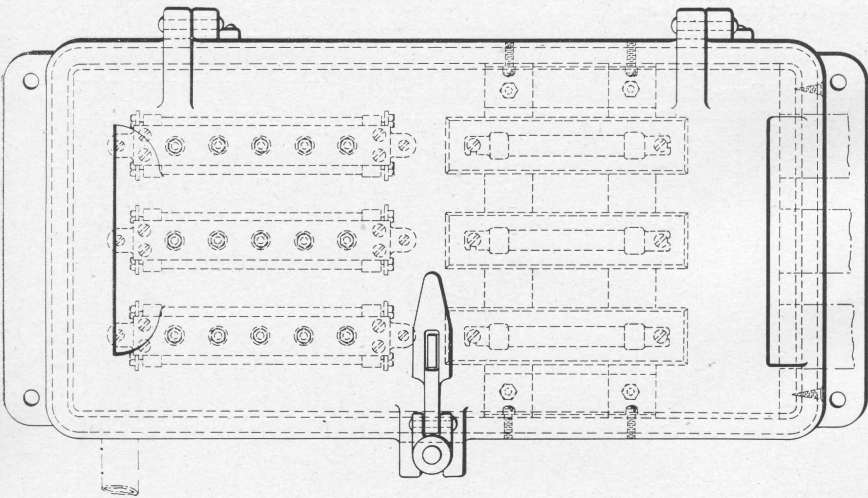
Fig.

A Instrument Case with terminals. No automatic stop release valve or bottom plate.....

Drawing Reference	List Price	
C-7503	110 00	



SECTIONAL SIDE VIEW



FRONT VIEW

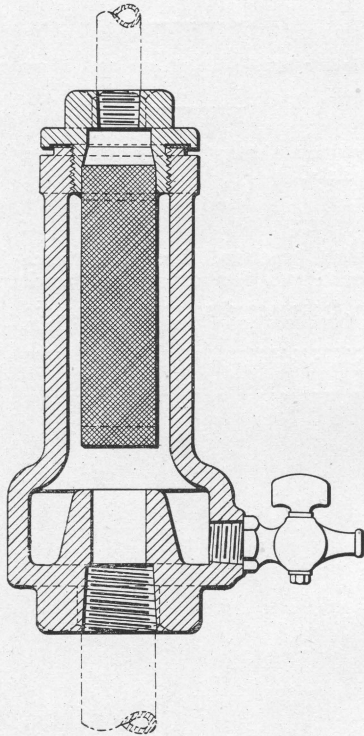
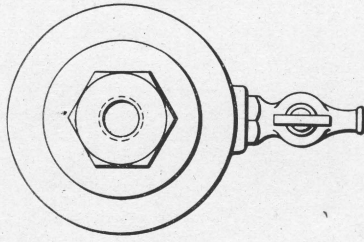
A
CASE FOR RESISTANCE UNITS AND FUSES

CASE FOR RESISTANCE UNITS AND FUSES

Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Cast Iron Case, with brackets, three Resistance Units and three Fuses for single rail track circuit	1-C-7542	58 80
Aa	as above, with brackets, two Resistance Units and two Fuses.....	2-C-7542	44 70
Ab	as above, with brackets, one Resistance Unit and one Fuse.....	3-C-7542	33 60



A

AIR STRAINER

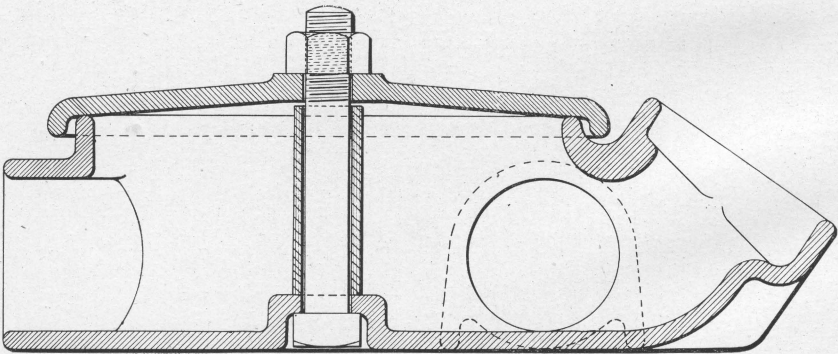
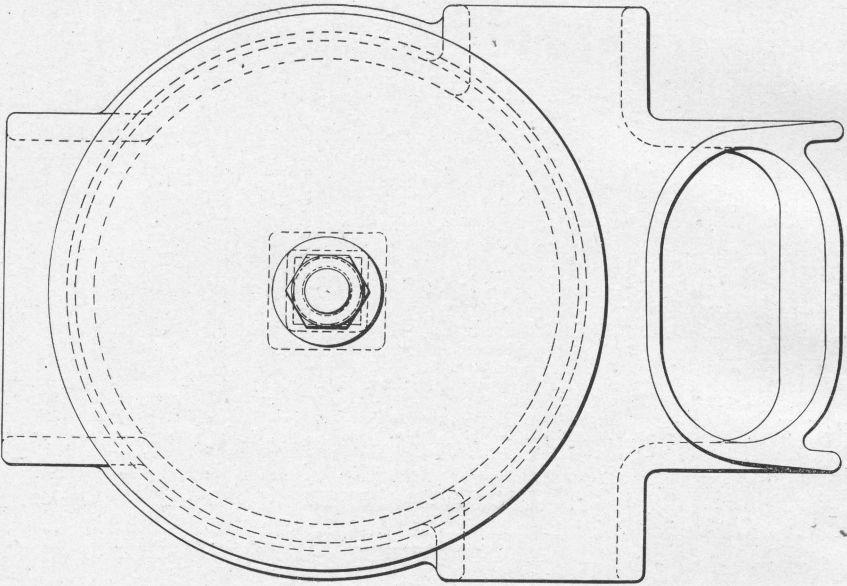
AIR STRAINER

Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig. A Air Strainer, with 1/4-inch pipe tap.....
 Aa as above, with 1/2-inch pipe tap.....

Drawing Reference	List Price
B-10656	4 80
	4 96



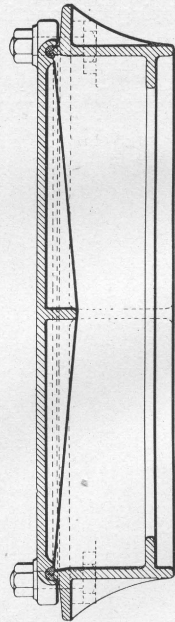
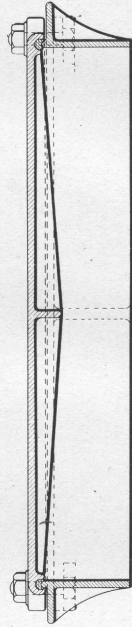
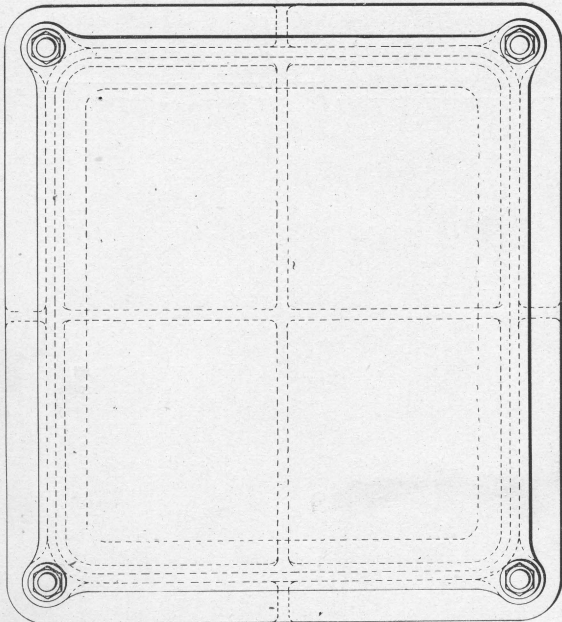
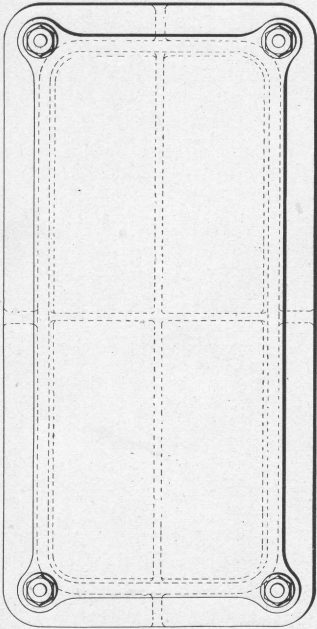
A
JUNCTION BOX

JUNCTION BOX

Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price	
A	Junction Box.....	6-C-7540	3 00	



B

CAST IRON MANHOLE COVERS

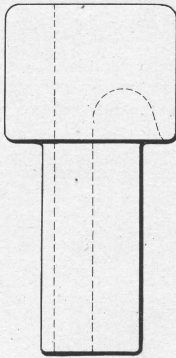
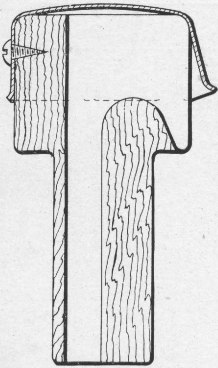
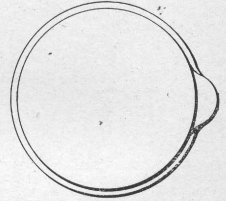
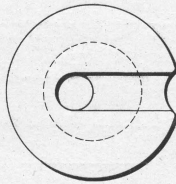
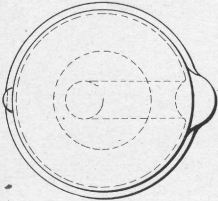
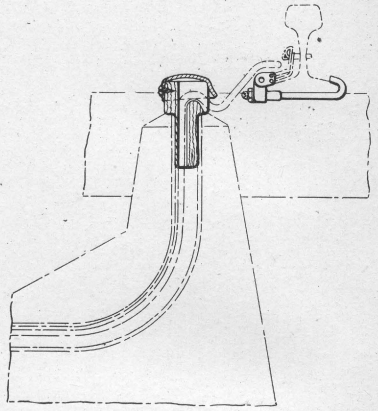
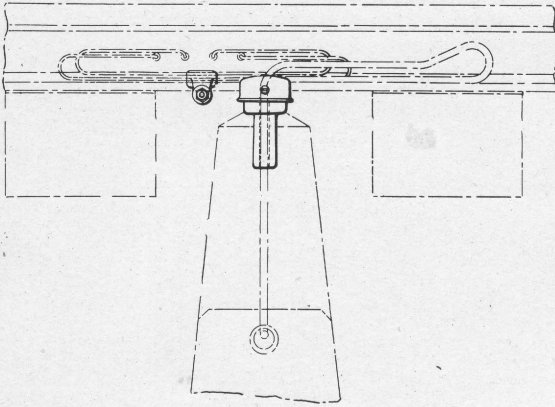
A

CAST IRON MANHOLE COVERS

Order by Name, Plate and Letter

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price	
A	Cast Iron Manhole Cover.....	3-C-7522	12 60	
B	Cast Iron Manhole Cover.....	6-C-7522	8 50	



2

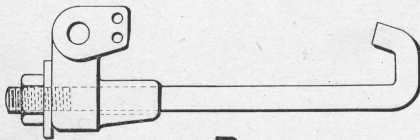
A

1

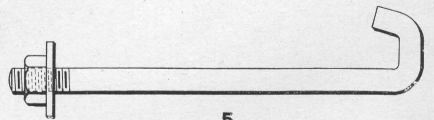
4



3



B



5

PLUG AND CAP FOR BOOT LEG AND TRANSFORMER RAIL CONNECTION.

PLUG AND CAP FOR BOOT LEG AND TRANSFORMER RAIL CONNECTION

Order by Name, Plate and Figure

The drawing references are shown merely for convenience in checking material with shipping lists and invoices.

Fig.		Drawing Reference	List Price
A	Insulating Plug, with Cap and Screw for Boot Leg..	3-B-10349	1 18
B	Transformer Rail Connection, with Hook Bolt, Nut and Washer.....	3-B-10349	1 18
1	Insulating Plug only.....	2-B-10349	76
2	Cap for Insulating Plug.....	1-B-10349	42
3	No. 12x5/8-inch Wood Screw.....		01
4	Transformer Rail Connection.....	157-B-8064	1 06
5	Hook Bolt, with Nut and Washer.....	138-B-7913	12

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